55-1520-217-PMD

*TM 55-1520-217-PMD

HEADQUARTERS
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CH-54A AND CH-54B AIRCRAFT PREVENTIVE MAINTENANCE DAILY

GENERAL INFORMATION AND SCOPE

WARNING: CERTAIN INSPECTIONS ARE MANDATORY SAFETY-OF-FLIGHT REQUIREMENTS, AND THE INSPECTION INTERVALS CANNOT BE EXCEEDED. IN THE EVENT THESE INSPECTIONS CANNOT BE ACCOMPLISHED AT THE DAILY INTERVAL, THE AIRCRAFT CONDITION STATUS SYMBOL WILL BE IMMEDIATELY CHANGED TO A RED X. THESE TYPE OF INSPECTION ITEMS ARE PRECEDED BY "MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEM".

NOTE: INSPECTION ITEMS CONTAINED IN THIS MANUAL ARE CONSIDERED THE MINIMUM REQUIREMENTS FOR PERFORMING A DAILY INSPECTION AND MUST BE PERFORMED. THE CUMULATIVE EFFECTS OF INSPECTION DEFERRALS ARE UNKNOWN AND COULD RESULT IN CATASTROPHIC FAILURE OR INCREASED MAINTENANCE AT A LATER DATE. THE USE OF SPECIAL LETTERING TO EMPHASIZE MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEMS IS NOT TO BE CONSTRUED AS AUTHORITY FOR DEFERRAL OF OTHER INSPECTIONS.

This copy is a reprint which includes current pages from Changes 1

*This manual together with TM 55-1520-217-PM supersedes TM 55-1520-217-PMS-1, 28 March 1975, and TM 55-1520-217-PMS-2, 28 March 1975, including all changes.

D101.11:

1. **Inspection Requirements.** This manual contains complete requirements for daily inspection for CH-54A and CH-54B aircraft unless otherwise noted. It does not contain instructions for repair, adjustment, or other means of rectifying conditions, nor does it contain instructions for troubleshooting to find causes for malfunctioning. Unless otherwise specified, specific tolerances, limits, etc., can be found in the applicable maintenance manuals. Use of the alphabetical index in the applicable manuals will facilitate locating the required information.

2. **Maintenance Activities.** The inspections prescribed by this manual will be performed at specific periods by Aviation Unit Maintenance (AVUM) activities with assistance of Aviation Intermediate Maintenance (AVIM) and Depot Maintenance activities when required.

3. **General Information.**

a. The inspection requirements contained herein are stated in such a manner as to establish which equipment is to be inspected and what conditions are desired/undesired. Compliance with the provisions outlined herein is required in order to insure that latent defects are discovered and corrected before malfunctioning or serious trouble result. Inspection requirements are arranged, as nearly as possible, according to the manner in which they will be performed. The requirements are divided into groups under area headings. (Figure 1)

b. The inspection designated herein will not be exceeded except in actual operational emergencies as explained herein. It is the commander's responsibility to determine (on an individual aircraft basis) when inspection intervals may be exceeded. For this purpose, operational emergencies are conditions of combat, or conditions of disaster which necessitate flight to evacuate aircraft or personnel. When aircraft are operated beyond the normal inspection due-time because of such emergency situations, a circled red X status symbol and an appropriate statement (to include authority) must be entered in blocks 16 and 17 on DA Form 2408-13 (Aircraft Inspection and Maintenance Record) until such time as the inspection is complete. Since safety must be jeopardized when inspections are delayed to meet emergency requirements, commanders will assure that the aircraft status symbol reverts to a red "X" and that delayed inspections are accomplished immediately upon termination of the actual emergency. When unusual local conditions of environment, utilization, mission, experience of flight crew and maintenance personnel, periods of inactivity, etc., are encountered, the maintenance officer will, at his discretion, increase the scope and/or frequency of maintenance or inspections as necessary to insure safe flight.

c. This manual may contain inspection requirements applicable to specific equipment not installed on your aircraft. Those requirements should be disregarded.

d. DA Form 2408-13 shall be used to record all deficiencies or shortcomings discovered during accomplishment of the inspection to insure the current status of the aircraft is recorded.

e. A one and one-half inch space following area of inspection is being provided to allow insertion of additional inspection items as may be required by local command inspection procedures.

4. Special Instructions.

a. A daily inspection will be performed after the last flight of the day, or prior to the next flight.

b. Total work time requirements to accomplish the inspection is stated at top of the checklist.

5. Reporting Errors and Recommending Improvements. You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 located in the back of the applicable aircraft maintenance manual (when using the 2028-2 from the maintenance manual, insure the publication number and title refer to this PMD), directly to Commander, US Army Aviation Systems Command, ATTN: DRSAV-MPSD, 4300 goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished to you.

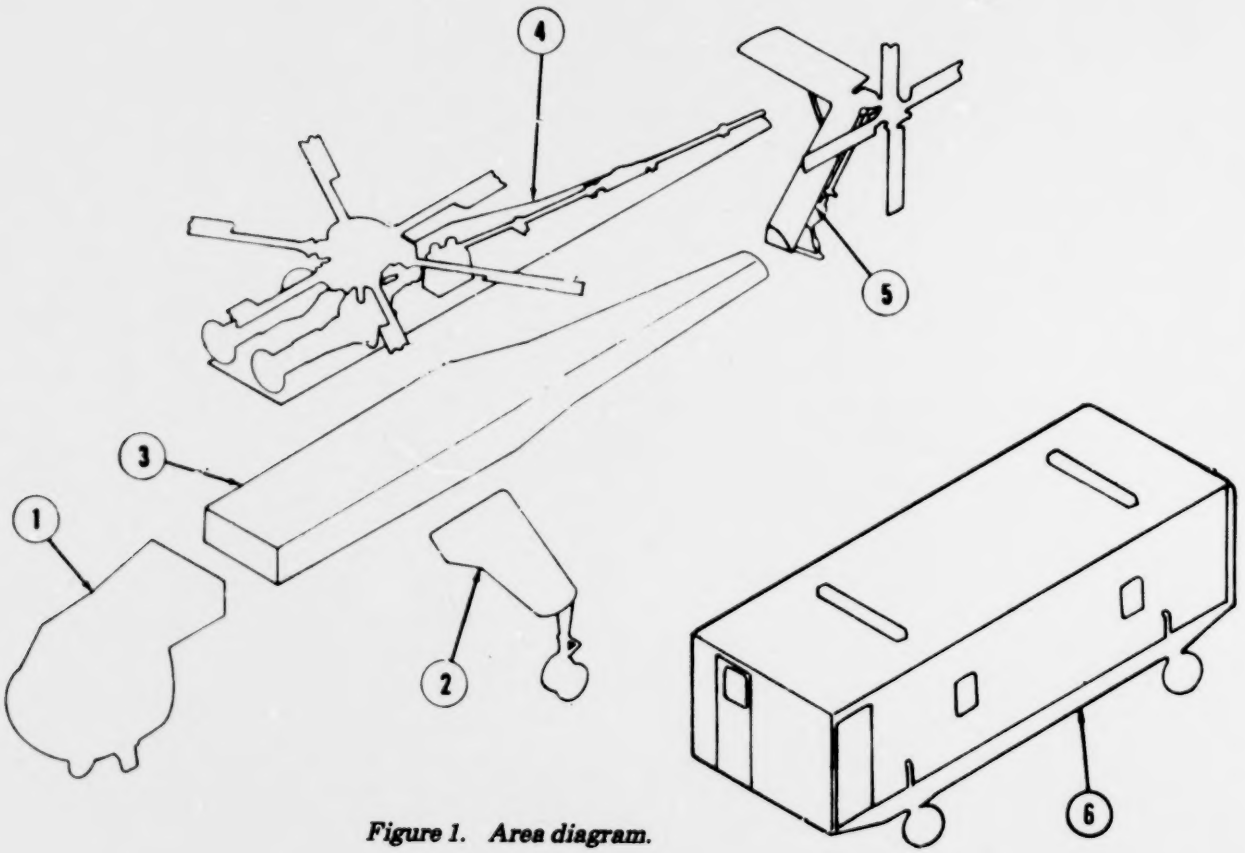

Figure 1. Area diagram.

AREA NO. 1: Cockpit	**All surfaces, material, components, and equipment located interior and exterior of the cockpit, electronics compartment, and overhead crawlway (attic) extending aft to manufacturing break point at fuselage STA 210 (includes the nose gear and the aft pilot's cockpit).**
AREA NO. 2: Main Landing Gear and Support Installation	**All surfaces, material, components, and equipment located interior and exterior of the right and left main landing gears and support installations outboard from fuselage center section right and left sides.**
AREA NO. 3: Fuselage Sides and Bottom	**All surfaces, material, components, and equipment located interior and exterior of the fuselage right and left sides and bottom from fuselage STA 210 to 772 (includes but not limited to load levelers, hoist, hoist well, bottom of main gear box, and the cargo hook).**
AREA NO. 4: Fuselage Top	**All surfaces, material, components, and equipment located above and including the top surface of the fuselage from STA 210 to 772 (includes but not limited to the engines, upper portion of the main gear box, main rotor head and blades, hydraulic panels, auxiliary power plant and drive shafts).**
AREA NO. 5: Pylon	**All surfaces, material, components, and equipment located interior and exterior aft of STA 772 (includes but not limited to horizontal stabilizer, tail rotor and blades, tail gear box, intermediate gear box and tail skid).**
AREA NO. 6: Pod (when attached)	**All surfaces, material, components, and equipment located interior and exterior of entire Pod (includes but not limited to rolling gear).**

PREVENTIVE MAINTENANCE DAILY CHECKLIST TM 55-1520-217-PMD

The Preventive Maintenance Daily Checklist will be accomplished following the last flight of the day or prior to the first flight on the next day on which the aircraft is flown. The inspection consists of visual examination and operational checks to determine that the aircraft can safely and efficiently perform its assigned mission.

DAILY INSPECTION TOTAL WORK TIME: 8 HOURS

Seq. No.	Item and Procedure
	GENERAL
1.1	Inspect aircraft forms and records for recorded discrepancies (TM 38-750).
	COCKPIT
1.2	Cockpit windshield and windows for cracks, crazing, deteriorated sealing, security, free operation, positive locking, and cleanness.
1.3	Windshield wipers for security; blades for condition.
1.4	Windshield washer reservoir for proper fluid level (FULL), system for leaks.
1.5	Cockpit entrance doors and hinge fittings for distortion, cracks, corrosion, and loose screws; doors for security and positive latching; emergency release handles for proper position and security. Plastic guards for condition.
1.6	Pitot heads, orifices for obstruction, cleanness, security of mounting, and alignment.
1.7	Dessicant cartridges in pitot lines for tightness and color (color blue).
1.8	Anti-collision, landing light, and cargo light lens for cracks and security.
1.9	Nose wheel tire for cuts, blisters, proper pressure (visual) and excessive treadwear (TM 55-2620-200-24).
1.10	Nose gear shock strut for leakage and extension. Piston for scoring and cleanness.
1.11	Nose landing gear torque arm assembly for cracks, distortion, and excessive play.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
	NOTE Lateral play between cylinder or piston and torque arm lugs in excess of 0.024 inch requires replacement of torque arm bushings. Lateral play between apex ends of torque arm lugs in excess of 0.019 inch requires replacement of torque arm bushings.
1.12	Nose landing gear shimmy damper for leakage.
1.13	Nose gear lock linkage for security and deformation.
1.14	Nose landing gear lock mechanism for obvious damage.
1.15	Nose ski for damage, cracks, and security (if installed).
1.16	Nose ski centering spring and cables for security and fraying; towing adapter for cracks, damage, and security (if installed).
1.17	Electronic compartment armor plate(s) and support brackets for security, distortion, impact damage, and cracks. Inspect for loose or missing hardware and structure or flight control rod interference (if installed).
1.18	Master brake cylinders, parking brake valves, shuttle valves, and pressure and return lines for chafing, leakage, distortion, and security.
1.19	Flight control rods, bellcranks, housing and yoke assemblies inside electronics compartment for cracks, distortion, and security; stops for safety; rod end bearings for freedom of self-aligning movement, jamnuts for security.
1.20	Nose gear tiedown ring for proper stowage.
1.21	Battery for leakage and security; battery quick disconnect for security. If battery is leaking (wet), remove and replace (TM 11-6140-203-14-2). Vent lines for obstruction, kinking and security.

"FOD REMINDER"

Seq. No.	Item and Procedure
1.22	Safety belt release buckles for proper latching; shoulder harness and inertia reel for proper operation. Seat cushions for condition. Latches and hinges for condition.
1.23	Safety belts and shoulder harnesses for damage, corrosion, cuts, fraying, and security. Inertia reel cable for fraying.
1.24	Seat armor for security, impact damage, missing hardware. Protective edging around armor plate for security and condition. Latches and hinges for operation and condition (if installed).
1.25	Pilot's, Copilot's fan for evidence of overheating and free movement of shock mounts; mounting connections and adjacent wiring for chafing and security.
1.26	Compass correction card and radio frequency card for availability, legibility, current, and signature.

Seq. No.	Item and Procedure
1.27	N_1 and fuel shut-off control quadrant for security of levers, limit switches, and fire warning lights; stops for proper position. Cables for binding and proper operation.
1.28	The following items on APP control panel for security of mounting, legibility of decals, and range markings; tachometer, exhaust temperature gage, lights, and switches. Temperature limit positioner for proper position.
1.29	Overhead circuit breaker and control panels for legibility of markings, security, and damage of switches, rheostats and lights, wiring connections and adjacent wiring for security; panel mounting for security.
1.30	Collective stick friction lock for free/ proper operation; boot for condition.
1.31	Portable fire extinguisher for designated location, broken or missing seal and extinguisher and brackets for security.

"FOD REMINDER"

Seq. No.	Item and Procedure
1.32	Aft pilot's barrier and rail for cracks and security of attachment.
1.33	Observer and crew seats and mount flanges for cracks, fabric tears, and security.
1.34	First aid kits for designated location, presence of inspection date tag, broken or missing seal, and security (TM 55-1500-328-25).
1.35	Emergency axe for security.
1.36	Flight AFCS servo controls enclosure armor plate(s) and support brackets for security, distortion, impact damage, and cracks. Inspect for loose or missing hardware, structure or flight control rod interference. Inspect hydraulic filter button check in.
1.37	Load leveler emergency release air bottle for 1500 psi; manual three-way valve reset button pushed in; cylinder and lines for chafing, security, and leakage; control linkage for security (if installed) (CH-54A only).
1.38	Tail rotor control cables plastic coating for fraying, corrosion under cover, and security.
1.39	Hydraulic contamination filter (located on right side of canted bulkhead) for no show of red button. (If red button protrudes, reset. If button continues to protrude, clean/replace filter.) (CH-54B only.)
1.40	All attic fuel lines for signs of leakage.
	MAIN LANDING GEAR AND SUPPORT INSTALLATION
2.1	Right main tires for cuts, blisters, and proper pressure (visual). Excessive tread wear (TM 55-2620-200-24).
2.2	Right main wheels for obvious damage (visual).
2.3	Right brake hydraulic lines for chafing, leaking and security. Inspect brake linings for wear.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
2.4	Right jacking and kneeling hydraulic lines for chafing, leaking and security (CH-54A only).
2.5	Right main landing gear shock strut piston for scoring, cleanness, leakage, proper servicing extension, (see instruction plate).
2.6	Right main landing gear torque arm assembly for cracks, distortion, and excessive play. NOTE Lateral play between cylinder or piston and torque arm lugs in excess of 0.021 inch requires replacement of torque arm bushings. Lateral play between apex ends of torque arm assemblies in excess of 0.017 inch requires replacement of torque arm bushings.
2.7	Right main landing gear tie-down rings for security.
2.8	Right ski for damage, cracks, and security (if installed).
2.9	Right ski centering spring and cables for security and fraying (if installed).
2.10	Right range extension box beam and support tubes for cracks, damage, and security; box beam to tank bolts for security; box beam leveling jacks for tightness (tank should not move) (if installed).
2.11	Right range extension tank drains (location on bottom of tank for condensation) (if installed).
2.12	Fuel vent lines for damage, security, and obstructions.
2.13	Hydraulic drain lines for evidence of leakage, chafing, and obstructions.
2.14	Right oil and hydraulic drain lines for leakage, security, chafing, and obstructions.
2.15	Right position light lens for cracks and security.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
2.16	Static ground wire for security and physical contact with ground.
2.17	Right kneeling dome for cracks and security (CH-54A only).
2.18	Left main tires for cuts, blisters, and proper pressure (visual). Excessive treadwear (TM 55-2620-200-24).
2.19	Left main wheels for obvious damage (visual).
2.20	Left brake hydraulic lines for chafing, leakage, and security. Inspect brake lining for wear.
2.21	Left jacking and kneeling hydraulic lines for chafing, leakage, and security (CH-54A only).
2.22	Left main landing gear shock strut piston for scoring, cleanness, leakage, and proper servicing/extension (see instruction plate).
2.23	Left main landing gear torque arm assembly for cracks, distortion, and excessive play.

Seq. No.	Item and Procedure
	NOTE Lateral play between cylinder of piston and torque arm lugs in excess of 0.021 inch requires replacement of torque arm bushings. Lateral play between apex ends of torque arm assemblies in excess of 0.017 inch requires replacement of torque arm bushings.
2.24	Static ground wire for security and physical contact with ground.
2.25	Left ski for damage, cracks, and security (if installed).
2.26	Left ski centering spring and cables for security and fraying (if installed).
2.27	Left range extension box beam and support tubes for cracks, damage, and security; box beam to tank bolts for security; box beam leveling jacks for tightness (tank should not move) (if installed).

"FOD REMINDER"

Seq. No.	Item and Procedure
2.28	Left range extension tank drains (located on bottom of tank) for condensation (if installed).
2.29	Pressure refueling receptacle for leakage and damage.
2.30	Left position light lens for cracks and security.
2.31	Left kneeling dome for cracks and security (CH-54A only).
2.32	Left main landing gear tiedown rings for security.
2.33	Left oil and hydraulic drain lines for evidence of leakage, security, chafing, and obstructions.
	FUSELAGE SIDES AND BOTTOM
3.1	Fuselage left side skin for cracks, corrosion, distortion, and loose rivets and bolts.
3.2	Left load levelers for security of attachment and for leakage.
3.3	External fuel and hydrualic lines for leaks and chafing; drain lines for obstructions (fuselage left side) (TM 55-1500-204-25/1).
3.4	Fuel cell area for external leakage. Visually check fuel filler caps for leakage and positive locking.
3.5	Airframe fuel filters for water or other contamination.
3.6	Tail rotor control cables and turnbuckles for security, and chafing; pulleys for condition, security, and chafing.
3.7	Fuselage bottom skin for cracks, corrosion, distortion, and loose rivets. Access panels for cracks and security.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
3.8	Fuselage (bottom) drain grommets for obstruction and security.
3.9	Fuel sump drains for water and other contamination.
3.10	Fuel sump and boost pump area for evidence of fuel cell leakage.
3.11	Armor plates for impact damage, security, cracks and missing hardware (if installed).
3.12	Cargo hook, swivel, and hoist assembly for obvious damage.
3.13	Hoist cover for clearance, damage and security. Hook humidity indicator for proper blue color (CH-54A only).
3.14	Hoist cable cutters (guillotine) and wiring (located in hoist well) for damage, chafing, and security.

Seq. No.	Item and Procedure
3.15	Hoist decoupler cylinder and lines for chafing and security, and leakage; electrical wiring and connectors for security and damage. Decoupler arm attachment and mount for deformation and cracks. Support arm side over for clearance and security.
3.16	Hoist limit and safety switches and wiring for security. Wiring for damage and chafing.
3.17	Hoist well fuel, oil, and hydraulic lines for chafing and leakage; valves, hoist motor, and fittings for leakage; wiring for chafing and security. Check security of 4-way valve.
3.18	Tilt table assemblies (right side of hoist well) for security and condition. Brackets for security and condition.
3.19	APP fuel primer pump lines for chafing and security; pump and fittings for leakage; wiring for chafing and security (TM 55-1500-204-25/1) (if installed).

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
3.20	Fuselage right side skin for cracks, corrosion, distortion, loose rivets, and bolts.
3.21	Right tail rotor control cables and plastic coating for chafing around pulleys, turnbuckles for safety; pulleys and attachments for security (fuselage right side).
3.22	Flight control rods for distortion, interference, security and damage. Rod ends for condition.
3.23	Flight control bellcranks, and bellcrank attaching structure for distortion, cracks, interference, damage and security.
3.24	Flight control bellcranks and bellcrank attaching structure for distortion, cracks, interference, security and damage. Right side of fuselage.
3.25	Check right load levelers for security of attachment and leakage.

Seq. No.	Item and Procedure
	FUSELAGE TOP AREA MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEM WARNING If indicator shows red or black, all flight operations must be discontinued.
4.1	MAIN ROTOR BLADE PRESSURE INDICATORS FOR PROPER SAFE INDICATION. MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEM
4.2	MAIN ROTOR BLADE PRESSURE INDICATORS FOR PROPER FUNCTIONING.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

C1

Seq. No.	Item and Procedure
4.3	Main rotor blades general condition, i.e., spar for nicks, dents, scratches, distortion; pockets for cracks, tears, distortion; tip caps for excessive erosion (as evident by cracking or wear-through), cracks and security. Abrasive strip for cracking, wrinkling, or wear-through. Safety of retention bolts.
4.4	Main rotor head sleeve and spindles and vertical hinge for leakage. Main rotor hub, plate, plate spacers, and sleeve and spindles for dents, nicks, and corrosion.
4.5	Main rotor spindle reservoirs for proper oil level (CH-54B only).
4.6	Main rotor damper accumulator indicator rod for proper position (within range shown on decal), lines for chafing, leakage, and security (CH-54B only).
4.7	Main rotor damper reservoir for proper fluid level (full mark on plastic top) (CH-54A only).
4.8	Main rotor head cover assembly ("beanie") and inspection window for security and cracks.
4.9	Main rotor control rods for condition and security.
4.9.1	(CH-54A only). Upper inboard control bracket for cracks and corrosion (visual). Refer to TM 55-1520-217-23-1, chapter 5.
4.10	Main rotor anti-flapping and droop restrainers for broken springs.
4.11	Main rotor anti-flapping and droop restrainers for cracks, bent arms, and anti-flap for binding through range of travel. (If binding occurs, disassemble, clean and inspect for damaged parts.)
4.12	Main rotor dampers for leakage; hydraulic lines and hoses for chafing and leakage.
4.13	Main rotor stationary and rotating swashplate for obvious damage.
4.14	Main rotor stationary and rotating scissors for obvious damage.
4.15	Main rotor shaft for cleanness. Check dust boots for condition and security.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
4.16	Main rotor servos for excessive leakage; pilot valve boots for deterioration and presence of water. Control rods for looseness between rod ends and tube, upper trunnion bolt for security. Right lateral servo load transducer connector for security and proper connection.
4.17	Main rotor servos 1st and 2nd stage pressure and return lines for chafing, kinks and security; all control rods, bellcranks, attaching brackets, for cracks, distortion and security.
4.18	Main rotor servo armor plate(s) and support brackets for impact damage, security, missing hardware, and interference (if installed).
4.19	Main gear box dipstick for proper oil level (full mark 30 minutes after shutdown); filler cap for spring tension. Breather vent for obstructions.
4.20	Main gear box accessories for security, leakage, and obvious damage.

Seq. No.	Item and Procedure
4.21	Both main drive shafts (engine-to-gear box) for nicks and scratches. Thomas coupling for obvious damage and security. Input seal for leakage. Main gear box input housing for discoloration.
4.22	Rotor brake package and lines for leakage, presence of water, security, and proper oil level (indicator on red FULL mark).
4.23	Rotor brake attachment bolt holes and disc key hole slots for heat cracks and crazing.
4.24	Main gear box oil cooler fan blades for damage; belts for wear and looseness, support structure for cracks.
4.25	Main gear box oil cooler core for leakage. Lines for chafing and leakage.
4.26	APP clutch for obvious damage, leakage, and security.
4.27	APP drive shaft for nicks and scratches. Thomas couplings for obvious damage and security.

"FOD REMINDER"

Seq. No.	Item and Procedure
4.28	APP adapter for obvious damage and security.
4.29	APP for proper oil level (FULL mark on dipstick); mounting for cracks and distortion. APP fuel and compressor pressure lines for bends, dents, breaks and loose connections. Check aft mounts for looseness.
4.30	APP electrical harness for loose or frayed wires, rubbing or chafing, condition of connections, and security of attachment points. Complete APP externally for fuel and oil leakage (TM 55-2835-204-24).
4.31	APP air inlet screens for contamination and security (TM 55-2835-204-24).
4.32	Hydraulic panels for cracks and security of components.
4.33	Hydraulic panel reservoirs for proper level (full mark on sight gages).
4.34	APP accumulator for proper pressure (3000 to 3500 on gage).
4.35	Hydraulic panels contamination filters for no show of red button. If red button protrudes, reset. If button continues to protrude, clean/replace filter.
	NO. 1 ENGINE
4.36	EAPS stratatube mini-screens for damage and security; interconnecting struts for bending, looseness; separator mounts and support structure for cracking, bending or looseness; separator interior/exterior structure for cracks, corrosion, wear, damage, and loose or missing parts (if installed). (Interior inspections are to be performed by entering separator.)
4.37	Engine air particle separator (EAPS) flexible hoses, tubes, and fittings for security, wear, and distortion; door pulleys and control cabling for condition and security (if installed).

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
4.38	Engine air particle separator (EAPS) blower impeller for buildup of dirt on blades. Check blower impeller for scraping and rubbing (if installed).
4.39	Commpressor inlet guide vanes for nicks, dents, obvious cracks and other evidence of passage of foreign material (TM 55-2840-230-24) (without EAPS).
4.40	First stage compressor blades and vanes for nicks, dents, or other evidence of passage of foreign material, curling of first stage blade tips (not acceptable) (TM 55-2840-230-24) (without EAPS).
4.41	Check blower exhaust doors for freedom of operation (if installed). MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEM (APPLICABLE ONLY IF EAPS DOORS ARE OPEN)
4.42	CHECK THAT ALL ITEMS ARE REMOVED AND INTERIOR IS FREE OF ALL LOOSE ITEMS AND DEBRIS BEFORE EAPS DOORS ARE CLOSED (if installed).
4.43	External tubing, hoses, and electrical leads for security of all connections, clamps, and brackets; evidence of chafing and wear; evidence of fuel or oil leakage (TM 55-2840-230-24).
4.44	Fire surveillance detector units for security; support brackets for cracks.
4.45	Oil tank for evidence oil.
4.46	Condition and positive locking of filler cap, cracks, dents, or corrosion; leakage at fittings and drain valve; worn oil tank vibration dampers (TM 55-2840-230-24).
4.47	Ignition system exciters for cracks and security of mounting (TM 55-2840-230-24).
4.48	Fuel pump housing for leakage (TM 55-2840-230-24).

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
4.49	Fuel coolant oil cooler for cracks, dents, corrosion, and leakage from weep holes at housing rear (TM 55-2840-230-24) NOTE Weep holes vent area between dual seals to indicate seal leakage.
4.50	Fuel pump housing and mounting flange for cracks, leakage, and security of attachment (TM 55-2840-230-24).
4.51	Fuel control for security of attachment, leakage, and security of mechanical linkage inlet pressure sensing tube for damage and security; obstruction of drain line (TM 55-2840-230-24).
4.52	Component drive gear box for security of installation and oil leaks (TM 55-2840-230-24).
4.53	Fuel de-icing system heater body and covers for cracks, dents, or irreparable damage; heater tubing for security of connections (TM 55-2840-230-24).
4.54	Collective bias control for security of attachment to fuel controls.
4.55	N_1 control for security of attachment. Stops for proper position.
4.56	N_2 actuator control for attachment and security. Wiring for condition.
4.57	N_2 tachometer shaft housing for cracks and oil leakage. For CH-54B only, secondary overspeed switch and wiring for security (TM 55-2840-230-24).
4.58	Diffuser case for bulged and discolored areas which indicate full nozzle or manifold discrepancies (TM 55-2840-230-24).
4.59	Left engine range extension bleed air lines for damage and security (if installed).
4.60	Engine forward mounts and fittings for security and distortion.

"FOD REMINDER"

Seq. No.	Item and Procedure
4.61	Combustion chamber outer case for cracks, dents, distortion, and hot spots (TM 55-2840-230-24).
4.62	N_2 gear box for security and leakage (TM 55-2840-230-24).
4.63	Gas turbine case for localized overheating and warpage (TM 55-2840-230-24).
4.64	Free turbine inlet case and duct assembly (external) for cracks, dents, and distortion (TM 55-2840-230-24).
4.65	Free turbine shaft outer case and exhaust duct weldments and flanges for denting and cracking (TM 55-2840-230-24).
4.66	Free turbine (N_2) external weldments (that make up case) and bosses for cracking (TM 55-2840-230-24).
4.67	Engine rear mount for security of installation, distortion, nicks, dents, cracks, and scratches.
4.68	Drive shaft index wheels for obvious damage and security (CH-54B only).
4.69	Exhaust components for cracks and distortion.
	NO. 2 ENGINE
4.70	EAPS stratatube mini-screens for damage and security; interconnecting struts for bending, looseness; separator mounts and support structure for cracking, bending or looseness; separator interior/exterior structure for cracks, corrosion, wear, damage, and loose or missing parts (if installed). (Interior inspections are to be performed by entering separator.)

"FOD REMINDER"

Seq. No.	Item and Procedure
4.71	Engine air particle separator (EAPS) flexible hoses, tubes, and fittings for security, wear, and distortion; door pulleys and control cabling for condition and security (if installed).
4.72	Compressor inlet guide vanes for nicks, dents, obvious cracks and other evidence of passage of foreign material (TM 55-2840-230-24) (without EAPS).
4.73	First stage compressor blades and vanes for nicks, dents, or other evidence of passage of foreign material, curling of first stage blade tips (not acceptable) (TM 55-2840-230-24) (without EAPS).
4.74	Engine air particle separator (EAPS) blower impellers for buildup of dirt on blades. Check blower impeller for scraping and rubbing (if installed).
4.75	Check blower exhaust doors for freedom of operation (if installed). MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEM (APPLICABLE ONLY IF EAPS DOORS ARE OPEN)

Seq. No.	Item and Procedure
4.76	CHECK THAT ALL ITEMS ARE REMOVED AND INTERIOR IS FREE OF ALL LOOSE ITEMS AND DEBRIS BEFORE EAPS DOORS ARE CLOSED (if installed).
4.77	External tubing, hoses, and electrical leads for security of all connections, clamps, and brackets; evidence of chafing and wear; evidence of fuel or oil leakage (TM 55-2840-230-24).
4.78	Fire surveillance detector units for security; support brackets for cracks.
4.79	Oil tank for evidence oil.

"FOD REMINDER"

Seq. No.	Item and Procedure
4.80	Condition and positive locking of filler cap, cracks, dents, or corrosion; leakage at fittings and drain valve; worn oil tank vibration dampers (TM 55-2840-230-24).
4.81	Ignition system exciters for cracks and security of mounting (TM 55-2840-230-24).
4.82	Fuel pump housing for leakage (TM 55-2840-230-24).
4.83	Fuel coolant oil cooler for cracks, dents, corrosion, and leakage from weep holes at housing rear (TM 55-2840-230-24). NOTE Weep holes vent area between dual seals to indicate seal leakage.
4.84	Fuel pump housing and mounting flange for cracks, leakage, and security of attachment (TM 55-2840-230-24).
4.85	Fuel control for security of attachment, leakage, and security of mechanical linkage inlet pressure sensing tube for damage and security; obstruction of drain line (TM 55-2840-230-24).
4.86	Component drive gear box for security of installation and oil leaks (TM 55-2840-230-24).
4.87	Fuel de-icing system heater body and covers for cracks, dents, or irreparable damage; heater tubing for security of connections (TM 55-2840-230-24).
4.88	Collective bias control for security of attachment to fuel controls.
4.89	N_1 control for security of attachment. Stops for proper position.
4.90	N_2 actuator control for attachment and security. Wiring for condition.

"FOD REMINDER"

Seq. No.	Item and Procedure
4.91	N_2 tachometer shaft housing for cracks and oil leakage. For CH-54B only, secondary overspeed switch and wiring for security (TM 55-2840-230-24).
4.92	Diffuser case for bulged and discolored areas which indicate full nozzle or manifold discrepancies (TM 55-2840-230-24).
4.93	Left engine range extension bleed air lines for damage and security (if installed).
4.94	Engine forward mounts and fittings for security and distortion.
4.95	Combustion chamber outer case for cracks, dents, distortion, and hot spots (TM 55-2840-230-24).
4.96	N_2 gear box for security and leakage (TM 55-2840-230-24).
4.97	Gas turbine case for localized overheating and warpage (TM 55-2840-230-24).
4.98	Free turbine inlet case and duct assembly (external) for cracks, dents, and distortion (TM 55-2840-230-24).
4.99	Free turbine shaft outer case and exhaust duct weldments and flanges for denting and cracking (TM 55-2840-230-24).
4.100	Free turbine case (N_2) external weldments (that make up case) and bosses for cracking (TM 55-2840-230-24).
4.101	Engine rear mount for security of installation, distortion, nicks, dents, cracks, and scratches.
4.102	Drive shaft index wheels for obvious damage and security (CH-54B only).
4.103	Exhaust components for cracks and distortion.

"FOD REMINDER"

Seq. No.	Item and Procedure
	GENERAL
4.104	All top area flexible and rigid lines for chafing and security.
4.105	All top deck area control rods, lines, and fitting for security, cracks, distortion, or leakage. All inspections plus foreign object damage (TM 55-1500-204-25/1).
4.106	Tail rotor control cables for security and chafing, pulleys for condition, security and chafing and fair leads installed.
4.107	Tail rotor drive shaft for cracks, nicks, dents, scratches, and distortion; bearing viscous dampers for leakage; (if any leakage exists replace damper). Bearing supports for security and cracks. Thomas couplings for obvious cracks. Radio antenna bracket and shield for cracks and security.
4.108	Top deck area skin for cracks, distortion, and looseness. Rivets for looseness.
4.109	Entire top deck area for foreign objects. Walkway material for security. Hydraulic line covers for cracking and security.
4.110	Wiring harness for obvious damage and security.
	PYLON
5.1	Horizontal stabilizer attachment fittings for cracks and security; struts for cracks, distortion, and security; skin for cracks, dents, corrosion and loose rivets (TM 55-1500-204-25/1).
5.2	Tail rotor servo unit for leakage security, hydraulic lines for leakage and chafing.
5.3	Tail rotor servo valve linkage, inspect its condition (be sure that it is free of corrosion and/or cracks), freedom of movement (bearings and hinge points), and security of attachment. (If corrosion or restricted movement is observed, link assembly should be replaced (TM 55-1520-217-23).

"FOD REMINDER"

Seq. No.	Item and Procedure
5.4	Anti-collision and position light for security; lenses for cracks and security; electrical wiring for chafing and security.
5.5	Tail rotor blades for cracks, dents, and corrosion; bonding separation and cleanness; safety of retention bolts. Tip caps for excessible erosion (as evident by cracking or wear-through), cracks and security.
5.6	Tail rotor blade flapping stops for obvious damage and plunger for extended position in hub.
5.7	Tail rotor lube oil reservoir for leakage and security of attachment (drop in oil level indicates sleeve spindle leakage).
5.8	Pitch change beam for obvious damage, cracks, and security.
5.9	Tail rotor pitch control links for cracks, bending, security and proper safety. Bearings for wear. Contact between bearing fall flange and edge of bearing outer race (visual).
5.10	Rubber guards on each outboard side of pitch link bearing for excessive wear, cuts or ageing. Physically rotate pitch link to insure freedom of movement.
5.11	Armor plates and support brackets for damage, security, and missing hardware (if installed).
5.12	Tail rotor gear box for proper oil level; seals for leakage, caps, drain plug, and chip detector for security; chip detector wiring for chafing, damage, and security.
5.13	Tail rotor gear box for security (visual).
5.14	Tail rotor gear box vent for obstructions; leakage at mating flanges, sight gage window, and input and output seals.
5.15	Intermediate gear box for proper oil level; seals for leakage; caps, drain plug, and chip detector for security, chip detector wiring for chafing, damage, and security. Inspect sight gage for discoloration and security.

"FOD REMINDER"

Seq. No.	Item and Procedure
5.16	Intermediate gear box for security. Mounting lugs and surrounding support structure for cracks and/or corrosion (visual).
5.17	Tail skid shock strut cylinder for leakage; supports struts for wear, cracks and distortion; actuator wiring for chafing.
5.18	Tail skid actuator for security, exposed shock strut piston shaft for cleanliness, lubrication and full extension; skid foot for security.
5.19	Pylon drive shaft for obvious damage.
5.20	Tail rotor control rods for cracks, distortion, worn bearings, security and proper safety.
5.21	Pylon skin for cracks, corrosion, distortion, loose rivets (TM 55-1500-204-25/1).
5.22	Pylon stabilizer fittings for cracks (visual).
5.23	Pylon screens and fairings for cracks and security.
	LUBRICATION
5.24	Lubricate in accordance with lubrication order contained in Chapter 2 of TM 55-1520-217-23.
	FORMS AND RECORDS
5.25	Ascertain that all entries on forms, records, and work sheets have been completed or updated and new forms initiated as required (TM 38-750). Annotate the DA Form 2408-13, the quantity of fuel and oil in the tanks.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
	POD (When Attached)
6.1	Prior to each flight and after pod to helicopter attachment, visually inspect attachment fittings and the surrounding area for obvious cracking or excessive distortion.
6.2	Prior to each flight check for adequate pod to airframe clearance. (Rubber strips just contact or within 1/8 inch of bottom of helicopter.)
6.3	Prior to each flight visually inspect all manual locking pins on load levelizer for proper engagement.
6.4	Check windows for cleanliness.
6.5	Prior to each flight visually inspect all ramp hatches for proper engagement.
6.6	When carrying personnel, inspect for proper adjustment of vertical pin for troop transport attachment (should be 3/16 inch gap).
6.7	Seats and safety belts for damage, corrosion, cuts, fraying and security (if installed).
6.8	Inspect fire extinguishers for installation and security of attachment, presence of inspection tag, broken or missing seal. Check inspection due date.
6.9	Inspect emergency axes for installation and security of attachment.
6.10	Inspect for proper stowage, connection of pod power (AC and DC) electrical cables, and ICS cable.
6.11	Inspect junction box panel covers properly secured.
6.12	Inspect first aid kit for designed location, presence of date tag, broken or missing seal, and security (TM 55-1500-328-25). Check inspection due date.
6.13	Inspect circuit breaker panel for security and circuit breaker for proper engagement.

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Seq. No.	Item and Procedure
	ROLLING GEAR
6.14	Inspect tires for blisters, cuts and other damage. Excessive treadwear and slippage marks.
6.15	Inspect wheel cylinder hand pump handles and stowage brackets for security.

Seq. No.	Item and Procedure

"FOD REMINDER"

By Order of the Secretary of the Army:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

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